

Title (en)
Ultrasound converter and ultrasound sensor

Title (de)
Ultraschallwandler und Ultraschallsensor

Title (fr)
Transducteur à ultrasons et capteur à ultrasons

Publication
EP 1902789 A1 20080326 (DE)

Application
EP 07405234 A 20070813

Priority
CH 15192006 A 20060922

Abstract (en)
The transducer (1) has an adaptation layer (5) for acoustic impedance matching of a piezo-ceramic disc (3) at an environmental medium. The piezo-ceramic disc and the adaptation layer are embedded into a damping body (7). The layer is provided with a radiating surface (8), where a front side of the transducer with the radiating surface and a part of an upper surface of a cupular transducer housing (9) are coated with a parylene layer (11). The damping body is embedded into the transducer housing in such a manner that the radiating surface is free. Independent claims are also included for the following: (1) a method for manufacturing an ultrasound transducer (2) an ultrasound sensor comprising a housing (3) a method for manufacturing an ultrasound sensor.

Abstract (de)
Der Ultraschallwandler (1) und der Ultraschallsensor (13) umfassen einen Schutz gegen aggressive Chemikalien. Der Ultraschallwandler (13) ist mit einer Schutzschicht aus Parylene überzogen und wird innerhalb des Gehäuses (15) gegen einen an einem frontseitigen Absatz (25) des Gehäuses (15) anstehenden O-Ring (31) gepresst und in dieser Lage durch einen Pfropfen aus ausgehärtetem Giessharz gehalten.

IPC 8 full level
B06B 1/06 (2006.01); **G10K 9/122** (2006.01); **G10K 9/22** (2006.01)

CPC (source: EP)
G10K 9/22 (2013.01); **G10K 11/02** (2013.01)

Citation (search report)
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• [XA] EP 1430838 A1 20040623 - OLYMPUS CORP [JP], et al
• [A] US 5488957 A 19960206 - FREY GREGG W [US], et al
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• [A] EP 1260965 A2 20021127 - VALEO SCHALTER & SENSOREN GMBH [DE]

Cited by
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
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